Accountability Report

Issued 2017-18

Gwinnett School of Mathematics, Science, and Technology (GSMST)

IV Bray, *Principal*Anthony Smith, *Assistant Superintendent*



Gwinnett County Public Schools' accountability system for improving schools is called the Results-Based Evaluation System (RBES). RBES fairly and systematically measures a school's progress, providing a process that clearly communicates expectations; reviews, monitors, and supports school performance; and evaluates that performance. This report reflects achievement data and state data reporting from the 2016–17 school year, as well as consolidated information on the school's effectiveness, based on multiple measures and student characteristics. Using the data in this report, school administrators, teachers, and parent advisory groups developed

this year's Local School Plans for Improvement (LSPI) which outline our improvement goals and guide the work we will do throughout the 2017–18 school year to support student learning. These improvement plans are connected to the school district's strategic direction and our core business of teaching and learning. Find our school's LSPI on the website. The GSMST school council and school leaders collaborated on the highlights in this accountability report, which also serves as the school's annual report.

Please review this report to learn more about our improvement efforts and progress.

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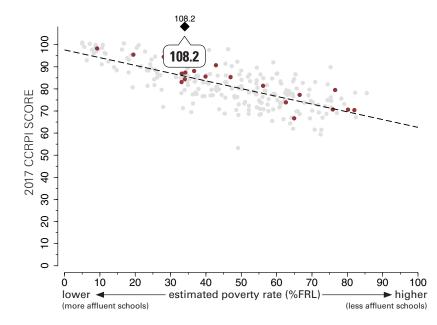
2016–17 Highlights

The School Effect: Putting GSMST's CCRPI score in context

The "school effect"— the impact of what happens in the classroom— acknowledges the work of our faculty and staff in meeting our students where they are academically, and helping them to make progress, no matter where they start. Schools all strive to add value to a student's education from year-to-year, causing students to make academic gains. One way to measure effectiveness in educating *all* students is to review a school's score on Georgia's College and Career Ready Performance Index (CCRPI), adjusting

for the level of poverty at the school, to see the school effect on students' academic growth.

This graphic representation plots CCRPI scores for high schools in the state (gray dots) against the percentage of the student population receiving free-and-reduced-lunch (FRL Percentage), a measure of poverty. The plotted points form a trend line representing the typical achievement level of a school in Georgia with its level of student poverty. The graph shows how GSMST (represented by a large black diamond) and all GCPS high schools (maroon dots) fare when considering expected performance based on poverty measures. Dots above the line are higher-than expected scores and dots below the line reflect lower-than-expected scores. *Note: Georgia schools that serve breakfast and lunch to all students at no cost are not included in this comparison.*



2016-17 Results: College-Admissions Tests

Students are encouraged to take one or both of the college-admissions tests that most colleges and universities require for admissions. The two tests—the SAT and the ACT—both assess college-readiness in language arts/reading and mathematics, with a science section on the ACT. Both the SAT and the ACT also have an optional essay component.

This is the first year of reporting for the redesigned SAT which better reflects what students are learning in class, including evidence-based reading, writing, and analysis across subject areas. In the new SAT, students are asked to apply their reading, writing, language, and math skills to answer questions in science and social studies contexts. In addition, the redesigned

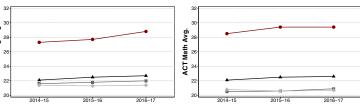
SAT Suite of Assessments makes it easier to help students navigate a path from high school through college and career. (Gwinnett students take two other tests in the SAT Suite, the PSAT 8/9 in 8th grade and the PSAT/NMSQT in 10th grade.) The ACT was most recently redesigned in 2015.

2016-17 SAT Averages

	Reading/Writing	Math	Total
GSMST	653	662	1315
GCPS	545	539	1084
Georgia	535	515	1050
National	533	527	1060

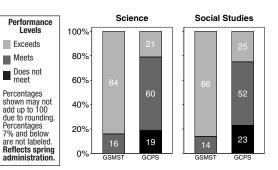
2016-17 ACT Averages

	English	Math	Reading	Science	Total
GSMST	29.8	29.4	28.8	29.1	29.4
GCPS	21.9	22.6	22.7	22.5	22.6
Georgia	21.0	20.9	22.0	21.3	21.4
National	20.3	20.7	21.4	21.0	21.0



2016–17 Results: High School Gateway Assessment

Gwinnett students must pass the school system's High School Gateway Assessment as a requirement for earning a regular diploma. Typically given in the 10th grade, the Gateway measures students' ability to write effectively about what they have learned in three courses taken in the first years of high school—Biology, Chemistry, and World History. Students write an essay on each topic, using their own knowledge and document-based information. Students regularly write essays and take assessments in class that mirror the Gateway format. This experience helps develop proficiency in content knowledge and writing skills required for college, career, and citizenship. To assist students, GCPS offers additional resources, tutorials, and practice opportunities. While most students are successful on their first try, those who are not have additional opportunities to take and pass the test.



2016-17 Results: Advanced Placement (AP) Exams

Advanced Placement (AP) courses are challenging, college-level classes taught by specially trained high school teachers. Students have the option of taking an AP exam at the end of the school year. Many colleges award credit for passing the exams or allow a student to exempt certain courses. The table below shows the percentage of students who took an AP class at GSMST High, compared to the county average. The chart also shows the percentage of optional, course-specific AP exams taken, as well as the

School
GSMST
GCPS

GeorgiaNational

■ National
■ GSMST
■ GCPS
■ Georgia
▼ National

percentage of test-takers who scored 3 or better on a 5-point scale on one or more AP exams. In 2016–17, 22.7% of courses taken at GSMST were AP courses, compared to 10.1% at all GCPS high schools.

	2014–15		2015–16		2016–17	
AP Percentages	GSMST	GCPS	GSMST	GCPS	GSMST	GCPS
% Students Who Took an AP Course	66.0	32.6	71.3	33.6	69.9	33.0
% AP Exams Taken	88.4	87.4	88.5	85.4	83.8	83.6
% Test-Takers Who Scored 3+	90.4	60.3	92.2	61.5	95.7	62.5

2016–17 Graduation Rate Information

The Graduation Rate is calculated using the number of students who begin 9th grade at the same time and graduate within four years with a regular education diploma. Students who take longer than four years to complete high school are not considered on-time graduates for the purpose of graduation rates, but they are not considered dropouts either. Additional students in the cohort will go on to graduate with a full diploma in their 5th year. Data shows that large numbers of students moving in during high school who are behind can have a negative impact on a school's graduation rate, just as having students move who can't be

accounted for affects the rate. A number of GCPS initiatives— Credit Recovery, Online Campus courses, 7th period classes at Phoenix High, and summer school—offer students more opportunities to get and stay on pace for on-time graduation. GCPS is working to ensure that all students graduate, even if some students need more time to do so, and that all students are college- and career-ready.

2014 2015 2016 2017 **GSMST** 99% 99% 100% 100% **GCPS** 75% 78% 80% 81% 73% 79% 79% 81% Georgia

Graduation Rate (2014 to 2017)

2016-17 Senior Report

	Students Completing HS†	Number Who Enrolled in College or Postsecondary School (Fall 2016)*	Number of Honor Graduates†	Seniors with Dual Enrollment†
GSMST	191	173	90	36
GCPS	11636	7791	3061	1213

^{*}Based on the National Student Clearinghouse enrollment records †Reflects system-reported data as of August 2017

2016–17 State Results: End of Course (EOC) Assessments

The comprehensive Georgia Milestones Assessment System measures how well students have learned the knowledge and skills outlined in the state content standards for English language arts, mathematics, science, and social studies. High school students took an End of Course (EOC) assessment for courses designated by the State Board of Education. The higher bar for student proficiency set by Milestones is aimed at better preparing students for college and career and providing a more realistic picture of academic

Percentage of End of Course Tests scored Proficient/Distinguished

Assessment	GSMST	GCPS	Georgia
9th Grade Lit. and Comp.	98.7	60.7	50.3
11th Grade American Lit. and Comp.	100.0	55.9	46.2
Algebra I	100.0	45.6	34.8
Geometry	98.9	51.3	43.0
Biology	99.0	54.0	44.5
U.S. History	93.0	50.2	44.2
Economics	99.5	49.9	44.2

Note. Results reflect a weighted average of winter and spring scores.

progress. The results factor in as 20% of a student's second-semester grade in the high school courses tested.

2016–17 State Reporting: Georgia's College and Career Ready Performance Index (CCRPI)

College and Career Ready Performance Index (CCRPI) is Georgia's statewide accountability system. CCRPI assesses how well students are prepared for college and careers and ensures that schools are focused on improving achievement among all students.

The index measures progress on accountability indicators such as content mastery, student attendance, and preparation for the next school level or college work. Schools earn CCRPI points based on indicators that vary by grade and school level and align with measures of college- and career-readiness. For

	GSMST	GCPS	Georgia	
CCRPI Total Score (out of 110 possible points)	108.2	80.9	77.0	
Achievement Points (out of 50)	56.0	36.9	34.6	
Progress Points (out of 40)	37.0	35.3	35.2	
Achievement Gap Points (out of 10)	10.0	6.7	6.7	
Challenge Points (out of 10) ED/EL/SWD Performance— 3.7 Exceeding the Bar— 1.5	5.2	2.0	0.5	
CCRPI Total Score is the sum of points in gray shaded cells.				

2016–17, schools may earn up to a set number of points in three main categories (achievement, progress, and achievement gap), for a total of 100 possible points, with an additional 10 possible challenge points.

At the high school level, schools earn CCRPI achievement points tied to a number of factors, including the percentages of students meeting or exceeding standards on state assessments, the percentage of students reading at grade level, the percentage of students missing six or fewer days during the school year, the percentage of graduates completing a career pathway, the percentage of college-ready graduates, the percentage of graduates earning college credits, the percentage of students scoring in the Proficient Learner or Distinguished Learner achievement levels on the Georgia Milestones assessments, and the four- and five-year graduation rates.

Progress points are tied to the level of academic progress students make from year to year, while achievement gap points are earned as schools work to close the gaps between student subgroups. Challenge points reflect a school's participation levels and achievement results for students with economic disadvantages (ED), English learners (EL), and students with disabilities (SWD). Points also may be earned for advanced academic work of a school's graduates, such as the percentage of seniors earning physics credit, earning three or more credits in the same world language, or completing work-based learning or a capstone project. In addition, schools in which teachers use data for planning individualized instruction and those with STEM certification may earn extra points as well. Innovative practices with demonstrated achievement gains and interventions that result in a positive school climate also may earn challenge points.

Under CCRPI, schools are awarded star ratings in two areas—school climate and financial efficiency—using on a five-star scale. Ratings range from a half-star to five stars. The School Climate rating takes into account discipline and attendance data as well as perceptions of the quality and character of the school and its learning environment. The Financial Efficiency rating is a measure that compares a school's spending per student to the overall academic performance of its students. The rating is calculated using three-year averages of spending and CCRPI scores. The School Climate and Financial Efficiency ratings for 2016–17 were not published at the time 2017 CCRPI results were released in fall. Once available, parents can find them here: http://www.gadoe.org/CCRPI/Pages/default.aspx

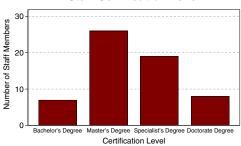
GSMST

Other 2016–17 Highlights...

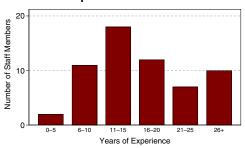
- GSMST was named a 2016 National Blue Ribbon School of Excellence by the U.S. Department of Education.
- GSMST led the state in scores for the College Career Ready Performance Index or CCRPI (108.2) as well as college-entrance exams, the SAT (1315) and the ACT (29.4).
- GSMST once again was ranked as the best high school in Georgia by *The Washington Post* and *U.S. News & World Report*.
- Sixteen students were National Merit Finalists and 72 students were honored as National AP Scholars, the highest designation awarded by the College Board for academic excellence.
- Nine projects advanced to the Georgia Science and Engineering Fair. Two projects qualified for the Intel International Science Fair.
- Our World Quest Team won the Tennessee World Affairs Council WQ competition and placed 21st at the national competition.
- One VEX Robotics team advanced to the World Championships.
- The GSMST Math Team took 5th place at the State Math Tournament and four students received individual recognition.
- Art students earned four Gold Keys and five Silver Keys in the Scholastic Art and Writing Awards.
- The Georgia Art Education Association selected a GSMST artwork submission as a district finalist for All-State.
- GSMST earned a gold medal and a place on the 2017 Governor's SHAPE Honor Roll. The award recognizes school level efforts in the areas of physical activity, nutrition, and wellness.
- A student won 1st place in the Georgia Reflections competition in the category of Dance Choreography.
- We had 11 students in All-State Orchestra and five in All-State Band.
- Our Student Council won numerous awards at the Georgia Association of Student Councils convention, including three 1st place honors and a Council of Excellence Award.
- The Science Bowl Team won the sub-regional competition at UGA and placed 2nd at the Southeast Regional Tournament in Savannah.
- GSMST's chapter of the Technology Student Association finished in 3rd place in state competition, earning 21 finishes in the Top 10.
- In Model UN competition, students received awards for three position papers and three delegate awards.
- Two students were among 13 Georgia students selected to take the U.S. National Chemistry Olympiad exam.
- The GSMST Science Olympiad Team finished in 4th place at the state tournament, earning two 2nd place finishes at invitational tournaments.
- "Infinitas," GSMST's literary magazine, was rated Excellent by the National Council of Teachers of English.

Staff Certification Level

2016-17 Staff Data



Experience in Education



Student Data (2014-15 to 2016-17)

	School Year		
	14–15	15–16	16–17
Enrollment	976	966	979
+American Indian/Alaskan Native*	0%	0%	0%
+Asian*	41%	44%	44%
+Black/African American*	26%	23%	23%
+Hispanic or Latino, any race	9%	10%	10%
+Multiracial, two or more races*	3%	3%	3%
+Native Hawaiian/Pacific Islander*	0%	0%	0%
+White*	19%	20%	20%
Special Education	1%	1%	1%
ESOL	1%	1%	0%
Free/Reduced Lunch	35%	33%	34%
Average Attendance	98%	98%	98%

*Not Hispanic or Latino

School Safety Perceptions

Based on responses from those with an opinion who responded to the 2016–17 RBES Perception Survey...

- 98.0% of students agreed or strongly agreed that they felt safe at GSMST High.
- 100% of parents agreed or strongly agreed that their child's school was safe.

The mission of Gwinnett County Public Schools is to pursue excellence in academic knowledge, skills, and behavior for each student, resulting in measured improvement against local, national, and world-class standards.

Gwinnett School of Mathematics, Science, and Technology

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